just as if it were broadcast on L1. Thus, a multi-frequency receiver may be built up from a set of such L1 receivers and frequency converters. Such a receiver may include five conventional GPS receivers 301-1:5 under control of the navigation processor 305. Each of four of the receivers 301 may handle a respective one of the four signals transmitted by the pseudolites 1-1. A frequency converter 315 between the antenna 317 and the front end of a GPS receiver 301 may modulate the incoming signal up or down to GPS L1 so the receiver 301 can work with the signal as if it were broadcast on L1. The fifth GPS receiver 301 may directly measure the satellite signals and does not require a frequency converter.

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More generally, the multi-frequency receiver 2 may include m+1 conventional GNSS receivers 301 under control of the navigation processor 305. Each one of m of the GNSS receivers 301 handles a respective one of the m signals transmitted by the pseudolites 1-1. The frequency converter 315 modulates the incoming signal up or down to a predetermined standard GNSS frequency so the standard receiver 301 can work with the signal as if it were broadcast on that predetermined standard GNSS frequency.

A marked-up version of the replacement paragraphs is attached.

## THE CLAIMS

Under 37 CFR  $1.21^{\circ}$ )(1), Applicants respectfully instruct the Examiner to amend the claims as follows:

1. (Once Amended Herein) [A pseudolite comprising:

a reference frequency oscillator;

multiple signal generators, communicatively coupled to and under the control of the reference frequency oscillator, for generating respective coherent signals at different frequencies; and

a transmitter antenna, communicatively coupled to the multiple signal generators, for transmitting the two signals at two or more distinct frequencies]

A positioning system comprising a signal plan, a plurality of pseudolite transmitters, a reference receiver, and a communication link: